

**Effective June 1, 2015, Env-Or 800 reads as follows:**

**CHAPTER Env-Or 700 GROUNDWATER RELEASE DETECTION PERMITS**

Statutory Authority: RSA 485-C:4, V & VI

**PART Env-Or 701 PURPOSE AND APPLICABILITY**

Env-Or 701.01 Purpose. The purpose of these rules is to implement RSA 485-C:13 relative to groundwater release detection permits by establishing procedures and requirements for obtaining a permit to monitor groundwater for the early detection of any impact associated with the activities listed in RSA 485-C:13, II and III.

Env-Or 701.02 Applicability. This chapter shall apply to any individual or entity that engages in any activity for which RSA 485-C:13 requires a groundwater release detection permit.

**PART Env-Or 702 DEFINITIONS**

Env-Or 702.01 “Ambient groundwater quality standards (AGQS)” means “ambient groundwater quality standards” as defined in RSA 485-C:2, I, as reprinted in Appendix C.

Env-Or 702.02 “Assessment monitoring” means monitoring required when detection monitoring performed in accordance with a groundwater release detection permit has indicated that the concentration of any constituent exceeds the background concentrations for the constituent as established in the groundwater release detection permit.

Env-Or 702.03 “Background concentration” means concentrations detected in up-gradient areas or areas otherwise unaffected by the activities at the facility permitted under the release detection permit.

Env-Or 702.04 “Contact person” means an individual who can be contacted on behalf of an applicant or permittee regarding the application or permit, respectively.

Env-Or 702.05 “Contamination” means the presence of any regulated contaminant, as defined herein, other than naturally-occurring substances at naturally-occurring or background levels, in soil, groundwater, soil gas, air, sediment, surface water, construction/excavation debris, or any other material, at a concentration that has the potential to adversely affect human health or the environment.

Env-Or 702.06 “Corrective action plan” means the corrective action proposed to prevent the discharge of regulated contaminants to groundwater, surface water, or soil.

Env-Or 702.07 “Department” means the department of environmental services.

Env-Or 702.08 “Detection monitoring” means routine monitoring specified in a groundwater release detection permit that is required in order to determine if a release has occurred at a facility issued a permit pursuant to Env-Or 700.

Env-Or 702.09 “Discharge” means the release or addition of any regulated contaminant to land, groundwater, or surface water.

Env-Or 702.10 “Facility” means all contiguous land and structures associated with an activity for which a groundwater release detection permit is required by RSA 485-C:13.

Env-Or 702.11 “Groundwater” means “groundwater” as defined in RSA 485-C:2, VIII, as reprinted in Appendix C.

Env-Or 702.12 “Groundwater release detection permit” means a permit issued under RSA 485-C:13 and Env-Or 700 to a facility owner for detection of any release of a regulated contaminant associated with the activities for which the permit was issued.

Env-Or 702.13 “Motor vehicle salvage yard” means a contiguous land area for the storage or deposit, of unregistered motor vehicles that are no longer intended for, or in condition for, legal use on the public highways.

Env-Or 702.14 “Person” means “person” as defined by RS 485-C:2, XI, as reprinted in Appendix C.

Env-Or 702.15 “Potential receptor” means a living organism or an environmental medium that is in the pathway of contamination from a discharge.

Env-Or 702.16 “Professional of record” means the professional engineer or professional geologist licensed under RSA 310-A who is responsible for the documents.

Env-Or 702.17 “Receptor” means a living organism or an environmental medium that is exposed to contamination from a discharge.

Env-Or 702.18 “Regulated contaminant” means “regulated contaminant” as defined in RSA 485-C:2, XIII, as reprinted in Appendix C.

Env-Or 702.19 “Resource recovery facility” means any facility engaged in an activity beyond sorting or physical volume reduction methods to treat or process solid waste into usable secondary materials or products, including but not limited to fuel, energy, or compost.

Env-Or 702.20 “Salvage yard” means a contiguous land area encompassing one-half acre or more, on or at which are stored or deposited scrap metal, junk machinery, or other materials intended for salvage that contain or potentially contain oil or other solid or liquid contaminants.

Env-Or 702.21 “Surface water” means “surface water” as defined in RSA 146-A:2, VI-b, as reprinted in Appendix C.

Env-Or 702.22 “Wellhead protection area” means “wellhead protection area” as defined in RSA 485-C:2, XVIII, as reprinted in Appendix C.

## PART Env-Or 703 PERMIT REQUIREMENTS

### Env-Or 703.01 Groundwater Release Detection Permit Required.

(a) Pursuant to RSA 485-C:13, II, and subject to the prohibited new uses in wellhead protection areas classified as GAA specified in RSA 485-C:12, a person shall obtain a groundwater release detection permit prior to siting or operating any of the following:

- (1) A hazardous waste disposal facility as defined under RSA 147-A;
- (2) A lined solid waste landfill;
- (3) A lined wastewater lagoon; or
- (4) A facility for processing soils contaminated with petroleum products.

(b) Pursuant to RSA 485-C:13, III, a person shall obtain a groundwater release detection permit prior to siting or operating, as applicable, any of the following in a wellhead protection area classified as GAA:

- (1) A new solid waste composting facility;
- (2) A new solid waste resource recovery facility;
- (3) An existing facility for outdoor bulk storage of road salt or other deicing chemicals;
- (4) An existing snow dump; or

(5) An existing motor vehicle salvage yard or salvage yard.

(c) A groundwater release detection permit shall not be required for a facility or activity permitted under a groundwater discharge permit issued pursuant to Env-Wq 402.

Env-Or 703.02 Groundwater Release Detection Permit Application.

(a) The person applying for a groundwater release detection permit shall submit the following on or with the application for a groundwater release detection permit:

- (1) The facility identification information, including information about the applicant, facility owner, property owner, and facility operator, specified in Env-Or 703.03;
- (2) The maps and facility plan specified in Env-Or 703.04 and Env-Or 703.05;
- (3) The additional information specified in Env-Or 703.06;
- (4) The certifications required by Env-Or 703.07; and
- (5) The fee specified by Env-Or 703.09.

(b) The applicant shall:

- (1) Sign and date the application as specified in Env-Or 703.08; and
- (2) Provide a copy of the complete application to the town/city clerk of the municipality in which the facility is or is proposed to be located prior to submitting the application to the department.

(c) The application shall be dated, signed, and sealed by the professional of record.

(d) If the facility plan required by (a)(2), above, is larger than 11 inches by 17 inches, the applicant shall also provide a copy of the plan that has been scaled to fit onto an 8-1/2 inches by 11 inches or 11 inches by 17 inches sheet and modified to make items listed in Env-Or 703.05(a), (b), and (f)(1)-(5) legible.

Env-Or 703.03 Facility Identification Information. The applicant for a groundwater release detection permit shall submit the following facility identification information on a form obtained from the department:

(a) Information about the applicant, facility owner, facility operator, and property owner, if other than the facility owner, as follows:

- (1) For any applicant, facility owner, facility operator, or property owner who is an individual, the individual's name, mailing address, daytime telephone number, and email address and fax number, if any; and
- (2) For any applicant, facility owner, facility operator, or property owner that is an organization, the following:
  - a. The organization's name and address as registered with the N.H. secretary of state;
  - b. The form of the organization, such as a corporation, partnership, political subdivision or agency of the state, a department, agency or instrumentality of the United States, or any other legal entity;
  - c. The URL of the organization's web site, if any; and
  - d. The name, title, and daytime telephone number of a contact person for the organization and the contact person's e-mail address and fax number, if any.

- (b) The name, physical address, property deed reference by county, book and page, and local tax map and lot number of the facility;
- (c) A complete description of the facility, its intended capacity, type of wastes or wastewater handled, together with supporting information describing the process involved in the treatment, storage, or disposal of wastes;
- (d) A description of management practices used to prevent potential contamination;
- (e) A description of facility construction including liner type, diversion ditches, and other pertinent construction details, as applicable;
- (f) Whether the facility is new or existing as of the date of the application and, for a new facility, an estimate of the construction time and the projected start-up date; and
- (g) The facility's North American Industrial Classification System (NAICS) number(s).

Env-Or 703.04 Required Maps. The maps required by Env-Or 703.02(a)(2) shall be as follows:

- (a) A U.S. Geological Survey (USGS) map, 7-1/2 minute series, marked to clearly identify the facility location; and
- (b) A potential receptors map using a tax map as a base, marked to identify and locate, to the extent ascertainable, the following:
  - (1) Streets within 1,000 feet of the facility;
  - (2) Properties, including tax map and lot numbers, ownership, and land use information, within 1,000 feet of the facility;
  - (3) Physical structures, storage areas, and buildings, including information on building use and existence of basements, within 1,000 feet of the facility;
  - (4) Surface waters within 1,000 feet of the facility; and
  - (5) Water supply wells, including type of use, within 1,000 feet of the facility.

Env-Or 703.05 Required Facility Plan. The facility plan required by Env-Or 703.02(a)(2) shall be prepared in accordance with the following:

- (a) The plan shall include a title, a legend, and a true north arrow;
- (b) The plan shall be drawn to scale and the scale shall be noted on the plan and include a graphic scale bar;
- (c) The base plan sources from which the facility plan was derived shall be noted on the plan;
- (d) The location, elevation, and datum of a bench mark shall be included, provided that if a bench mark referenced to NGVD is within 1,000 feet of the facility, the elevation shall be recorded using NGVD and the source of the NGVD bench mark information shall be noted on the plan;
- (e) Ground surface spot elevations and contours shall be marked to show topography; and
- (f) The facility plan shall identify and locate, to the extent ascertainable, the following:
  - (1) Physical structures, storage areas, and buildings associated with the facility;
  - (2) Existing and proposed groundwater monitoring wells that will be monitored;

- (3) Surface water sampling points;
- (4) Groundwater contours that accurately show current groundwater flow direction within 100 feet of the facility, with a table of water level measurements and elevations found in piezometers and monitoring wells used to develop the groundwater contours;
- (5) Surface waters within 100 feet of the facility;
- (6) Land surface contours within 100 feet of the facility;
- (7) Piezometers used to develop groundwater contours;
- (8) Soil borings and test pits within 100 feet of the facility;
- (9) Above and underground storage tanks associated with the facility;
- (10) Underground utilities at the facility; and
- (11) Subsurface drains at the facility.

Env-Or 703.06 Additional Information. The additional information required by Env-Or 703.02(a)(3) shall be as follows:

(a) A table summarizing all monitoring results to date from existing monitoring points, including initial background values for the parameters listed in (c)(2), below, and the regulated contaminants listed in the table of ambient groundwater quality standards (AGQS) in Env-Or 603.03;

(b) A list of reports on land use history, activities, water quality, and hydrogeology associated with the property on which the facility is located;

(c) A detailed proposal for a release detection monitoring program that includes the following:

(1) Monitoring for the chemicals listed in the table of AGQS in Env-Or 603.03;

(2) Monitoring of the following parameters as applicable to the property:

- a. Specific conductance;
- b. Iron;
- c. Chloride;
- d. Total Kjeldahl Nitrogen (TKN);
- e. pH;
- f. Temperature;
- g. Turbidity; and
- h. Oxidation-reduction potential (ORP);

(3) A proposed monitoring schedule;

(4) Monitoring locations; and

(5) Supporting hydrogeologic and groundwater quality information justifying the locations, frequency, and parameters selected;

(d) Test pit data and boring log data including:

(1) Soil sample descriptions according to:

- a. Unified Soil Classification System;
  - b. Burmister Classification System;
  - c. "Standard Practice for Classification of Soils for Engineering Purposes," document identification number ASTM D2487-11, dated 2011; or
  - d. "Standard Practice for Description and Identification of Soils, Visual Manual Method," document identification number ASTM D2488-09a, dated 2009;
- (2) Drilling methods;
- (3) "N-values" according to "Penetration Test and Split Barrel Sampling of Soil," document identification number ASTM D1586-11, dated 2011; and
- (4) Water table observations;
- (e) Well construction details of existing monitoring wells, top of well casing elevations, and measured depth to water table from top of casing.

Env-Or 703.07 Certifications. The certifications required by Env-Or 703.02(a)(4) shall be as follows:

- (a) Certification that applications have been submitted for all required local, state, or federal permits; and
- (b) Certification that a copy of the complete permit application has been provided to the town/city clerk of each municipality in which the facility is or will be located.

Env-Or 703.08 Signatures Required for Initial and Renewal Permit Applications.

- (a) If the applicant for a permit or permit renewal is an individual, the applicant shall sign and date the application.
- (b) If the applicant for a permit or permit renewal is an organization, the applicant shall authorize an officer or director of the applicant to sign the application, and the authorized individual shall sign and date the application and print or type his or her name and title.
- (c) A signature provided under (a) or (b), above, shall constitute certification that:
  - (1) The information contained in or otherwise submitted with the application is true, complete, and not misleading to the best of the applicant's knowledge and belief;
  - (2) The applicant understands that:
    - a. The submission of false, incomplete, or misleading information is grounds for denying the application or revoking any permit that is issued based on such information; and
    - b. The applicant is subject to the penalties for making unsworn false statements specified RSA 641:3 or any successor New Hampshire statute; and
  - (3) The applicant agrees to comply with all applicable rules and conditions of the permit, if issued.

Env-Or 703.09 Application Fee.

- (a) As authorized by RSA 485-C:4, VI, the applicant shall submit a fee of \$2,500 with the permit application.

(b) If paid by check or money order, the instrument shall be made payable to “Treasurer - State of NH.”

(c) State and local government including counties and other political subdivisions of New Hampshire shall be exempt from the fee specified in (a), above.

Env-Or 703.10 Action on Applications.

(a) Within 90 days from the receipt of a complete permit application, the department shall determine whether:

- (1) The requirements specified in Env-Or 703.02 through Env-Or 703.09 have been met; and
- (2) The proposed release detection monitoring program required by Env-Or 703.06(c) appears adequate to detect any releases.

(b) If the requirements identified in (a)(1), above, have been met and the proposed release detection monitoring program required by Env-Or 703.06(c) appears adequate to detect any releases, the department shall issue a permit for a period of 5 years, subject to renewal pursuant to Env-Or 703.12.

(c) The department shall notify the applicant of its decision in writing. If the decision is to deny the application, the written notice shall specify the reason(s) for the denial.

Env-Or 703.11 Permittee Obligations Upon Permit Issuance.

(a) Acceptance of the permit by the applicant shall constitute permission for the department to enter the permitted facility for the purpose of collecting information, examining records, collecting samples, and taking other actions needed to ensure compliance with the permit.

(b) Prior to commencing operations, the permittee shall submit to the department:

- (1) An as-built site plan on an 8-1/2 inch x 11 inch or 11 inch x 17 inch sheet, together with boring logs and well construction details; and
- (2) The results of 2 complete rounds of water quality testing.

Env-Or 703.12 Permit Renewal.

(a) If the permittee wishes to continue to operate a facility that is subject to a groundwater release detection permit beyond the 5-year permit term, the permittee shall submit the information specified in (d), below, to the department prior to the expiration of the permit but not more than 90 days prior to expiration.

(b) If the renewal application is submitted prior to the expiration of the permit, the permittee may continue to operate under the terms of the permit until a final decision on the renewal application has been made, even if that is after the expiration date.

(c) If the renewal application is not submitted prior to the expiration of the permit, the permittee shall discontinue active operation of the facility as of the expiration date but otherwise continue to comply with all conditions in the permit for which renewal is sought until:

- (1) The permit is renewed; or
- (2) The facility is closed in accordance with all applicable requirements.

(d) The renewal application shall be on a form obtained from the department that:

- (1) Includes an update of all information required by Env-Or 703.02(a) with all planned modifications included; and
- (2) Has been signed as specified in Env-Or 703.08.

- (e) The renewal application shall be dated, signed, and sealed by the professional of record.

Env-Or 703.13 Permit Modification.

(a) A permittee who wishes to request a permit modification shall submit a written request to the department that explains the reasons for the requested modification and includes a table summarizing all monitoring results to date from existing monitoring points.

(b) The department shall modify the permit or deny the request within 90 days of receipt of the request. If the department denies the request, the department shall notify the permittee in writing of the reason(s) for the denial.

(c) The department shall modify the permit if the applicant can demonstrate compliance with Env-Or 703.17, Env-Or 703.18, and Env-Or 703.19, as applicable.

(d) The department shall initiate a procedure under RSA 541-A:30 to modify a permit without request by the permittee if the department determines that:

(1) Issuance of the permit was based on false, incomplete, or misleading information, and the permit would have contained different conditions if true, complete, and not misleading information had been provided;

(2) Modification of the permit is necessary to ensure protection of human health or the environment; or

(3) Modification of the permit is necessary to ensure compliance with Env-Or 703.17, Env-Or 703.18, and Env-Or 703.19, as applicable.

(e) To initiate a permit modification procedure, the department shall provide the permittee with written notice that:

(1) Identifies the facility by name, department identification number, location, and permit number;

(2) Explains the action(s) the department proposes to take and the reason(s) for the proposed action;

(3) Identifies the department's authority for taking the proposed action;

(4) Explains the opportunity for an adjudicative hearing and related deadlines; and

(5) Lists the name, title, mailing address, and telephone number of the department representative who may be contacted regarding the notice.

(f) An adjudicative hearing on a permit modification initiated by the department pursuant to (d), above, shall:

(1) Be requested by the permittee to the department in writing within 30 days of receipt of the notice from the department; and

(2) Proceed in accordance with the provisions of Env-C 200 that relate to adjudicative proceedings.

Env-Or 703.14 Request for Permit Transfer.

(a) A release detection permit shall not be transferred without the express written consent of the department.



(b) To request approval to transfer a release detection permit, the permittee shall file a written request on a form obtained from the department that provides the following information:

- (1) The department permit number;
- (2) The facility name;
- (3) The site address, tax map and lot number, and the county, book, and page where the deed to the current owner is recorded;
- (4) The name, mailing address, daytime telephone number, and email address, if any, of the current permittee;
- (5) The name, mailing address, daytime telephone number, and email address, if any, of the person to whom the permit is proposed to be transferred and, if the person is an organization, the name, daytime telephone number, and email address, if any, of an individual authorized by the organization to speak on its behalf with the department about the proposed transfer; and
- (6) A summary of all monitoring results to date.

(c) The current permittee and the person to whom the permit is proposed to be transferred shall sign the transfer request as specified in Env-Or 703.15.

(d) If the current permittee is unable or unwilling to file a written request for the transfer with the department, the new permittee may file the request.

#### Env-Or 703.15 Signatures Required for Permit Transfers.

(a) If either of the parties to the permit transfer is an individual, the individual shall sign and date the permit transfer request and print or type his or her name.

(b) If either of the parties to the permit transfer is an organization, the organization shall authorize an officer or director to sign the transfer request, and the authorized individual shall sign and date the transfer request and print or type his or her name and title.

(c) A signature provided under (a) or (b), above, shall constitute certification that:

- (1) The information contained in or otherwise submitted with the request is true, complete, and not misleading to the best of the signer's knowledge and belief;
- (2) The signer understands that:
  - a. The submission of false, incomplete, or misleading information is grounds for denying the transfer or revoking any permit that is transferred based on such information; and
  - b. The signer is subject to the penalties for making unsworn false statements specified RSA 641:3 or any successor New Hampshire statute.

(d) If the new permittee files the request pursuant to Env-Or 703.14(d), the signature of the current permittee shall not be required.

#### Env-Or 703.16 Decision on Permit Transfer Request.

(a) Within 45 days of receiving a request for transfer, the department shall approve or deny the transfer request and notify both parties of its decision in writing.

(b) The department shall deny an application to transfer a permit if:

- (1) The facility is not presently in compliance with the permit, these rules or any other applicable statutes or rules, unless transferring the permit would facilitate returning the facility to compliance;
- (2) The permittee has failed to pay any outstanding penalties or fines issued under RSA 146-A, RSA 146-C, or RSA 147-A, unless all outstanding amounts will be paid in conjunction with the transfer;
- (3) The permittee has failed to pay any outstanding invoice associated with the department's recoverable cost pursuant to RSA 146-A, RSA 146-C, RSA 147-A, or RSA 147-B, unless all outstanding amounts will be paid in conjunction with the transfer; or
- (4) The permittee has failed to perform in accordance with a court order, consent decree or other settlement agreement relating to the property subject to the permit, unless transferring the permit would facilitate such performance.

Env-Or 703.17 Groundwater Release Detection Permit Compliance Criteria.

(a) The permittee shall conduct detection monitoring during the active life of the facility, during closure activities, and for the post-closure monitoring period in accordance with the specific monitoring program established in the release detection permit.

(b) The department shall remove a detection monitoring parameter for a facility if the permittee demonstrates that:

- (1) The constituent is not contained in the waste managed at the facility; and
- (2) The constituent is not generated as a result of the siting or operation of the facility.

(c) The permittee shall establish original background concentrations of all constituents required in the detection monitoring.

(d) If the concentration of any constituent in the detection monitoring is above the background value at any down-gradient monitoring well, the permittee shall:

- (1) Notify the department within 10 days after receiving results; and
- (2) Conduct assessment monitoring pursuant to Env-Or 703.18 for each monitoring well for which the concentration of any constituent is above the background value unless:
  - a. The permittee demonstrates by submission of a report to the department within 60 days of notice of exceedance pursuant to (d)(1) above, that the exceedance is the result of an off-site source of contamination or an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality; and
  - b. The department approves the report.

Env-Or 703.18 Assessment Monitoring. If required under Env-Or 703.17(d)(2), the permittee shall conduct assessment monitoring as follows:

(a) The permittee shall sample the groundwater for all regulated contaminants listed in the table of AGQS in Env-Or 603.03 and the additional parameters specified in Env-Or 703.06(c)(2) within 60 days of notifying the department of the exceedance in the detection monitoring;

(b) Based on the results of the sampling required by (a), above, the permittee shall consult with the department to determine the parameters and schedule for subsequent groundwater sampling;

(c) If sampling and analysis at a specific well indicates that concentrations of all regulated contaminants in the assessment monitoring are at or below background values for 2 consecutive sampling events, the permittee shall notify the department of this finding and return to detection monitoring at that well;

(d) The permittee shall submit the results of the assessment monitoring to the department within 45 days of the date of each round of sampling;

(e) The permittee shall establish a background concentration for each regulated contaminant discovered in the assessment monitoring for which a background concentration has not already been established for purposes of detection monitoring; and

(f) If the concentration of a regulated contaminant detected by assessment monitoring is above the background value but below the ambient groundwater quality standard established under Env-Or 603.03, the permittee shall:

(1) Notify the department within 10 days after receiving results; and

(2) Submit a corrective action plan and implementation schedule in accordance with Env-Or 703.19 to the department within 30 days.

Env-Or 703.19 Requirements for Corrective Action Plan.

(a) The corrective action plan submitted by the permittee pursuant to Env-Or 703.18(f)(2) shall include the following:

(1) Inspection and audit of activities and procedures at the facility to determine possible sources of contamination;

(2) Remediation of the source of the exceedance;

(3) Further groundwater investigation;

(4) Modification of facility operation as needed to eliminate the cause of the exceedance;

(5) Treatment of the waste stream as needed to eliminate the cause of the exceedance;

(6) Groundwater restoration; and

(7) If the facility operations cannot be modified to eliminate the cause of the exceedance or if the groundwater cannot be restored or remediated, a schedule of activities that will be implemented for facility closure.

(b) The corrective action plan shall be dated, signed, and sealed by the professional of record.

Env-Or 703.20 Corrective Action Plan Approval and Implementation.

(a) The department shall approve the corrective action plan if the department determines that the plan is reasonably designed to:

(1) Achieve compliance with background concentrations;

(2) Eliminate any future discharges of regulated contaminants to the groundwater; and

(3) Protect human health and the environment.

(b) The department shall approve the proposed implementation schedule upon determining that the schedule is protective of human health and the environment.

(c) The permittee shall implement the corrective action plan in accordance with the approved implementation schedule beginning within 30 days of department approval.

(d) If sampling and analysis at a specific well indicates that the concentration of each regulated contaminant in the assessment monitoring is at or below the corresponding background value for 2 consecutive sampling events, the permittee shall notify the department of this finding and return to detection monitoring at that well.

(e) If the concentrations of any regulated contaminant detected by assessment monitoring are above the AGQS established in Env-Or 603.03, the permittee shall:

- (1) Notify the department within 10 days after receiving results; and
- (2) If the exceedance is the result of a discharge from the facility, apply for a groundwater management permit as specified in Env-Or 607.

#### PART Env-Or 704 MONITORING AND REPORTING

##### Env-Or 704.01 Water Quality Sampling, Analysis, and Reporting.

(a) The permittee shall monitor groundwater quality to ensure compliance with the terms of the permit and these rules.

(b) The permittee shall monitor surface water points and water supply wells as specified in the permit to ensure that water quality is in compliance with applicable water quality standards and the terms of the permit.

(c) The permittee shall install at least one hydraulically up-gradient groundwater monitoring well to monitor ambient groundwater quality.

(d) The permittee shall operate and maintain the monitoring wells, piezometers, and other measurement, sampling, and analytical devices so that they perform to design specifications throughout the life of the monitoring program.

(e) The parameters to be monitored shall be determined on a site-specific basis depending on the regulated contaminants associated with the permitted activity.

(f) The frequency and location of water quality monitoring shall be determined on a site-specific basis depending on the hydrogeologic characteristics of the site and predicted rates of groundwater flow.

(g) The permittee shall submit the results of all sampling and analysis, including quality assurance and quality control results, required under a groundwater release detection permit to the department no later than the 45 days after the sampling date, except as provided for in Env-Or 703.15 and Env-Or 703.16.

(h) Analyses shall be performed by a laboratory certified by the U.S. Environmental Protection Agency (US EPA) or accredited by the department pursuant to Env-C 300.

(i) Sampling shall be performed in accordance with:

- (1) "Practical Guide for Ground-Water Sampling," EPA number /600/S2-85/104, US EPA, dated September 1985, available as noted in Appendix B;
- (2) "RCRA Ground-Water Monitoring: Draft Technical Guidance," document identification number PB87107751, US EPA, dated November 1992, available as noted in Appendix B;
- (3) "Standards Related to Environmental Sampling", 5<sup>th</sup> Edition, document identification number ASTM SAMP14, ASTM, dated 2014 (ASTM SAMP14), available as noted in Appendix B;

- (4) “SW 846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, US EPA, dated February 2007 (Revision 6), available as noted in Appendix B; and
- (5) “Standard Guide for Sampling Waste and Soils for Volatile Organic Compounds” document identification number ASTM D 4547-09, dated 2009, available as noted in Appendix B.

Env-Or 704.02 Groundwater Monitoring Wells.

- (a) Monitoring wells shall be designed, installed, developed, maintained and decommissioned in accordance with We 100-1000 and the practices described in:
  - (1) “Standards on Environmental Site Characterization”, Fourth Edition, document identification number ASTM SITECD10, dated 2010, available as noted in Appendix B; and
  - (2) ASTM SAMP14, available as noted in Appendix B.
- (b) Monitoring wells shall be constructed, maintained, and decommissioned only by a licensed New Hampshire water well contractor holding a valid technical drillers license under RSA 482-B.
- (c) Monitoring wells shall be:
  - (1) Developed prior to sampling; and
  - (2) Allowed to equilibrate a minimum of 2 weeks following installation prior to sampling.

PART Env-Or 705 WAIVERS

Env-Or 705.01 Purpose. The purpose of the rules in this part is to accommodate those situations where strict adherence to the rules is not needed to protect public health or the environment.

Env-Or 705.02 Initiating a Waiver Request.

- (a) Any person who is or would be directly and adversely affected by the strict application of a requirement established in Env-Or 700 may request a waiver thereof.
- (b) A request for a waiver shall:
  - (1) Be submitted in writing to the department;
  - (2) Include the information specified in Env-Or 705.03;
  - (3) Be signed as specified in Env-Or 705.04; and
  - (4) Be submitted as soon as the need for a waiver is identified.

Env-Or 705.03 Information Required for Waiver Request. The person requesting the waiver shall provide the following information:

- (a) The name, mailing address, and daytime telephone number of the person requesting the waiver and, if other than an individual, the name and daytime telephone number of a contact person and, if available, a fax number and e-mail address;
- (b) A description of the facility to which the waiver request relates, including name, address, and department permit number;
- (c) Identification of the rule for which a waiver is being sought;

- (d) A full explanation of why a waiver is being requested, including an explanation of the economic and operational consequences of complying with the rule as written;
- (e) A full explanation of the alternative(s) proposed to be implemented in lieu of complying with the rule(s) for which a waiver is sought, if any, with backup data for support;
- (f) A statement of whether the requested waiver can be of limited duration; and
- (g) A full explanation of how granting the requested waiver would meet the criteria specified in Env-Or 705.05(a).

Env-Or 705.04 Signature Required for Waiver Request.

- (a) The person requesting a waiver shall authorize an individual to sign and date the request.
- (b) The authorized individual shall sign and date the request and print or type his or her name and title by the signature.
- (c) The signature shall constitute certification that:
  - (1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and
  - (2) The signer understands that:
    - a. The submission of false, incomplete, or misleading information is grounds for denying the waiver request or revoking any waiver that is granted based on the information; and
    - b. He or she is subject to the penalties specified in New Hampshire law, currently RSA 641:3, for making unsworn false statements..

Env-Or 705.05 Department Action on Waiver Request.

- (a) The department shall grant a waiver if it determines that:
  - (1) The requirement to be waived is not established by statute, unless the statute that establishes the requirement expressly authorizes the department to grant waivers of the requirement;
  - (2) Granting a waiver will not result in any adverse effect on human health or the environment; and
  - (3) The aspect of facility siting or operations to which the waiver relates will be consistent with the purpose of the release detection program.
- (b) The department shall include such conditions, including time limitations, as are necessary to ensure that the activities conducted pursuant to the waiver will meet the criteria specified in (a), above.
- (c) The department shall issue a written response to a request for a waiver within 60 days of receipt of the request. If the request is denied, the written response shall specify the reason(s) for the denial.

**APPENDIX A: STATUTES IMPLEMENTED**

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>
Env-Or 700	RSA 485-C:13

**APPENDIX B: INCORPORATION BY REFERENCE INFORMATION**

<b>Env-Or Rule</b>	<b>Title (Document ID #) -- Date</b>	<b>Obtain at:</b>
		ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA 19428-2959 1-877-909-2786 (USA & Canada) <a href="http://www.astm.org/">http://www.astm.org/</a>
703.06(d)(1)c.	“Standard Practice for Classification of Soils for Engineering Purposes” (ASTM D2487-11) -- 2011	PDF \$49; Hardcopy \$49 + S/H
703.06(d)(1)d.	“Standard Practice for Description and Identification of Soils, Visual Manual Method” (ASTM D2488-09a) -- 2009	PDF \$49; Hardcopy \$49 + S/H
703.06(d)(3)	“Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils” (ASTM D1586-11) -- 2011	PDF \$42; Hardcopy \$42 + S/H
704.01(i)(3) 704.02(a)(2)	“Standards Related to Environmental Sampling”, 5th Edition (ASTM SAMP14) -- 2014	Online \$199
704.01(i)(5)	“Standard Guide for Sampling Waste and Soils for Volatile Organic Compounds” (ASTM D 4547-09) -- 2009	PDF \$49; Hardcopy \$49 + S/H
704.02(a)(1)	“Standards on Environmental Site Characterization”, Fourth Edition -- 2010	Online \$289
		Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 (202) 272-0167
704.01(i)(1)	“Practical Guide for Ground-Water Sampling” (600285104) -- Sept. 1985	No cost to download from: <a href="http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30000FRY.txt">http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30000FRY.txt</a>
704.01(i)(2)	“RCRA Ground-Water Monitoring: Draft Technical Guidance” (PB87107751) -- Nov. 1992	No cost to download from: <a href="http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra_gw.pdf">http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra_gw.pdf</a>
704.01(i)(4)	“SW 846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” February 2007 (Revision 6)	No cost to download from: <a href="http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm">http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm</a>

**APPENDIX C: STATUTORY DEFINITIONS****RSA 485-C:2:**

I. “Ambient groundwater quality standards” means maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities, as delineated in RSA 485-C:6.

VIII. “Groundwater” means subsurface water that occurs beneath the water table in soils and geologic formations.

XI. “Person” means any individual, partnership, company, public or private corporation, political subdivision or agency of the state, department, agency or instrumentality of the United States, or any other legal entity.

XIII. “Regulated contaminant” means any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment.

XVIII. “Wellhead protection area” means the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.

**RSA 146-A:2:**

VI-b. “Surface water” means perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, watercourses, and other bodies of water, natural or artificial;